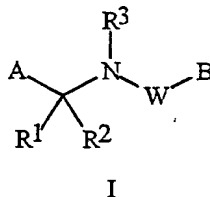


CLAIMS

What is claimed is:

1. A composition for controlling plant diseases caused by fungal plant pathogens comprising:

(a) at least one compound of Formula I, *N*-oxides and agriculturally suitable salts thereof



wherein

A is a substituted pyridinyl ring;

B is a substituted phenyl ring;

W is C=L or SO_n;

L is O or S;

R¹ and R² are each independently H; or C₁-C₆ alkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl or C₃-C₆ cycloalkyl, each optionally substituted;

R³ is H; or C₁-C₆ alkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl, C₃-C₆ cycloalkyl, C₂-C₁₀ alkoxyalkyl, C₂-C₆ alkylcarbonyl, C₂-C₆ alkoxy carbonyl, C₂-C₆ alkylaminocarbonyl or C₃-C₈ dialkylaminocarbonyl; and

n is 1 or 2; and

(b) at least one compound selected from the group consisting of

(b1) alkylenebis(dithiocarbamate) fungicides;

(b2) compounds acting at the bc₁ complex of the fungal mitochondrial respiratory electron transfer site;

(b3) cymoxanil;

(b4) compounds acting at the demethylase enzyme of the sterol biosynthesis pathway;

(b5) morpholine and piperidine compounds that act on the sterol biosynthesis pathway;

(b6) phenylamide fungicides;

(b7) pyrimidinone fungicides;

(b8) phthalimides; and

(b9) fosetyl-aluminum.

2. A composition of Claim 1 in which component (a) is a compound of Formula I wherein

A is a pyridinyl ring substituted with from 1 to 4 R⁵;

B is a phenyl ring substituted with from 1 to 4 R⁶;

W is C=O;

R¹ and R² are each independently H; or C₁-C₆ alkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl or C₃-C₆ cycloalkyl, each optionally substituted with one or more substituents selected from the group consisting of halogen, CN, NO₂, hydroxy, C₁-C₄ alkoxy, C₁-C₄ alkylthio, C₁-C₄ alkylsulfinyl, C₁-C₄ alkylsulfonyl, C₂-C₄ alkoxycarbonyl, C₁-C₄ alkylamino, C₂-C₈ dialkylamino and C₃-C₆ cycloalkylamino;

R³ is H; and

each R⁵ and R⁶ is independently C₁-C₆ alkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl, C₃-C₆ cycloalkyl, C₁-C₆ haloalkyl, C₂-C₆ haloalkenyl, C₂-C₆ haloalkynyl, C₃-C₆ halocycloalkyl, halogen, CN, CO₂H, CONH₂, NO₂, hydroxy, C₁-C₄ alkoxy, C₁-C₄ haloalkoxy, C₁-C₄ alkylthio, C₁-C₄ alkylsulfinyl, C₁-C₄ alkylsulfonyl, C₁-C₄ haloalkylthio, C₁-C₄ haloalkylsulfinyl, C₁-C₄ haloalkylsulfonyl, C₁-C₄ alkylamino, C₂-C₈ dialkylamino, C₃-C₆ cycloalkylamino, C₂-C₆ alkylcarbonyl, C₂-C₆ alkoxycarbonyl, C₂-C₆ alkylaminocarbonyl, C₃-C₈ dialkylaminocarbonyl or C₃-C₆ trialkylsilyl; or

each R⁵ and R⁶ is independently a phenyl, a benzyl, a phenoxy, a 5- or 6-membered heteroaromatic ring or a 5- or 6-membered nonaromatic heterocyclic ring, each ring optionally substituted with from one to three substituents independently selected from R⁷; or

two R⁶ attached to contiguous carbon atoms are taken together with said carbon atoms to form a fused phenyl ring, a fused 5- or 6-membered nonaromatic carbocyclic ring, a fused 5- or 6-membered heteroaromatic ring or a fused 5- or 6-membered nonaromatic heterocyclic ring, each fused ring optionally substituted with from one to three substituents independently selected from R⁷;

each R⁷ is independently C₁-C₄ alkyl, C₂-C₄ alkenyl, C₂-C₄ alkynyl, C₃-C₆ cycloalkyl, C₁-C₄ haloalkyl, C₂-C₄ haloalkenyl, C₂-C₄ haloalkynyl, C₃-C₆ halocycloalkyl, halogen, CN, NO₂, C₁-C₄ alkoxy, C₁-C₄ haloalkoxy, C₁-C₄ alkylthio, C₁-C₄ alkylsulfinyl, C₁-C₄ alkylsulfonyl, C₁-C₄ alkylamino, C₂-C₈ dialkylamino, C₃-C₆ cycloalkylamino, C₃-C₆ (alkyl)cycloalkylamino, C₂-C₄ alkylcarbonyl, C₂-C₆ alkoxycarbonyl, C₂-C₆ alkylaminocarbonyl, C₃-C₈ dialkylaminocarbonyl or C₃-C₆ trialkylsilyl.

3. A composition of Claim 2 wherein component (b) is cymoxanil.
4. A composition of Claim 2 wherein component (b) is a compound selected from (b2).
5. A composition of Claim 4 wherein component (b) is famoxadone.

6. The composition of Claim 1 wherein component (b) comprises at least one compound from each of two different groups selected from (b1), (b2), (b3), (b4), (b5), (b6), (b7), (b8) and (b9).

7. The composition of Claim 6 wherein component (b) comprises at least one compound selected from (b2) and at least one compound selected from (b1), (b3), (b6), (b7), (b8) or (b9); wherein the overall weight ratio of component (b) to component (a) is from 30:1 to 1:30; and wherein the weight ratio of component (b2) to component (a) is from 10:1 to 1:1.

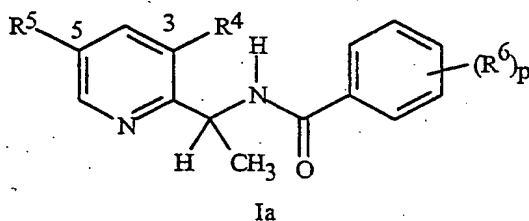
8. The composition of Claim 6 wherein component (b) comprises cymoxanil and at least one compound selected from (b1), (b2), (b6), (b7), (b8) or (b9); wherein the overall weight ratio of component (b) to component (a) is from 30:1 to 1:30; and wherein the weight ratio of cymoxanil to component (a) is from 10:1 to 1:1.

9. A method for controlling plant diseases caused by fungal plant pathogens comprising applying to the plant or portion thereof, or to the plant seed or seedling, a fungicidally effective amount of a composition of Claim 1.

10. The method of Claim 9 wherein the disease to be controlled is caused by the fungal pathogen *Phytophthora infestans*.

11. The method of Claim 9 wherein the disease to be controlled is caused by the fungal pathogen *Plasmopara viticola*.

12. A compound of Formula Ia and *N*-oxides and agriculturally suitable salts thereof



wherein

R^4 is halogen;

R^5 is C_1 - C_6 alkyl, halogen, NO_2 , C_1 - C_4 alkoxy, C_1 - C_4 haloalkoxy, C_1 - C_4 alkylthio, C_1 - C_4 alkylsulfinyl, C_1 - C_4 alkylsulfonyl, C_1 - C_4 haloalkylthio, C_1 - C_4 haloalkylsulfinyl or C_1 - C_4 haloalkylsulfonyl;

each R^6 is independently C_1 - C_6 alkyl, C_1 - C_6 haloalkyl, halogen, NO_2 , C_1 - C_4 alkoxy, C_1 - C_4 haloalkoxy, C_1 - C_4 alkylthio, C_1 - C_4 alkylsulfinyl, C_1 - C_4 alkylsulfonyl, C_1 - C_4 haloalkylthio, C_1 - C_4 haloalkylsulfinyl or C_1 - C_4 haloalkylsulfonyl; or

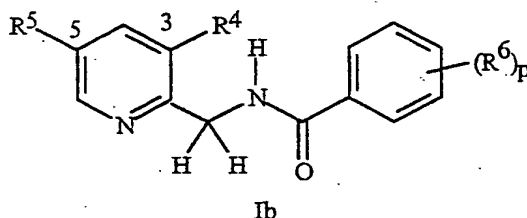
two R^6 attached to contiguous carbon atoms are taken together with said carbon atoms to form a fused 5- or 6-membered nonaromatic heterocyclic ring containing one

or two oxygen atoms and optionally substituted with from one to four substituents independently selected from F or methyl; and

p is 1, 2, 3 or 4.

13. The compound of Claim 12 wherein R^5 is Cl, Br, I, CH_3 , OCF_3 , $OCHF_2$, OCH_2CF_3 , OCF_2CF_3 , OCF_2CF_2H , $OCHF_2CF_3$, SCF_3 , $SCHF_2$, SCH_2CF_3 , SCF_2CF_3 , SCF_2CF_2H , $SCHF_2CF_3$, $SOCF_3$, $SOCHF_2$, $SOCH_2CF_3$, $SOCF_2CF_3$, $SOCF_2CF_2H$, $SOCHF_2CF_3$, SO_2CF_3 , SO_2CHF_2 , $SO_2CH_2CF_3$, $SO_2CF_2CF_3$, $SO_2CF_2CF_2H$ or $SO_2CHF_2CF_3$.

14. A compound of Formula Ib and *N*-oxides and agriculturally suitable salts thereof



wherein

R^4 is halogen;

R^5 is C_1 - C_4 haloalkoxy, C_1 - C_4 haloalkylthio, C_1 - C_4 haloalkylsulfinyl or C_1 - C_4 haloalkylsulfonyl;

each R^6 is independently C_1 - C_6 alkyl, C_1 - C_6 haloalkyl, halogen, NO_2 , C_1 - C_4 alkoxy, C_1 - C_4 haloalkoxy, C_1 - C_4 alkylthio, C_1 - C_4 alkylsulfinyl, C_1 - C_4 alkylsulfonyl, C_1 - C_4 haloalkylthio, C_1 - C_4 haloalkylsulfinyl or C_1 - C_4 haloalkylsulfonyl; or

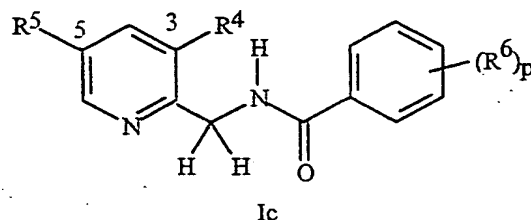
two R^6 attached to contiguous carbon atoms are taken together with said carbon atoms to form a fused 5- or 6-membered nonaromatic heterocyclic ring containing one or two oxygen atoms and optionally substituted with from one to four substituents independently selected from F or methyl; and

p is 1, 2, 3 or 4.

15. The compound of Claim 14 wherein R^5 is OCF_3 , $OCHF_2$, OCH_2CF_3 , OCF_2CF_3 , OCF_2CF_2H , $OCHF_2CF_3$, SCF_3 , $SCHF_2$, SCH_2CF_3 , SCF_2CF_3 , SCF_2CF_2H , $SCHF_2CF_3$, $SOCF_3$, $SOCHF_2$, $SOCH_2CF_3$, $SOCF_2CF_3$, $SOCF_2CF_2H$, $SOCHF_2CF_3$, SO_2CF_3 , SO_2CHF_2 , $SO_2CH_2CF_3$, $SO_2CF_2CF_3$, $SO_2CF_2CF_2H$ or $SO_2CHF_2CF_3$.

16. A compound of Formula Ic and *N*-oxides and agriculturally suitable salts thereof

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wherein

R^4 is Cl or Br;

R^5 is Br or I;

each R^6 is independently C_1 - C_6 alkyl, C_1 - C_6 haloalkyl, halogen, NO_2 , C_1 - C_4 alkoxy, C_1 - C_4 haloalkoxy, C_1 - C_4 alkylthio, C_1 - C_4 alkylsulfinyl, C_1 - C_4 alkylsulfonyl, C_1 - C_4 haloalkylthio, C_1 - C_4 haloalkylsulfinyl or C_1 - C_4 haloalkylsulfonyl; or

two R^6 attached to contiguous carbon atoms are taken together with said carbon atoms to form a fused 5- or 6-membered nonaromatic heterocyclic ring containing one or two oxygen atoms and optionally substituted with from one to four substituents independently selected from F or methyl; and

p is 1, 2, 3 or 4.